

SUPERINTENDENT'S REPORT

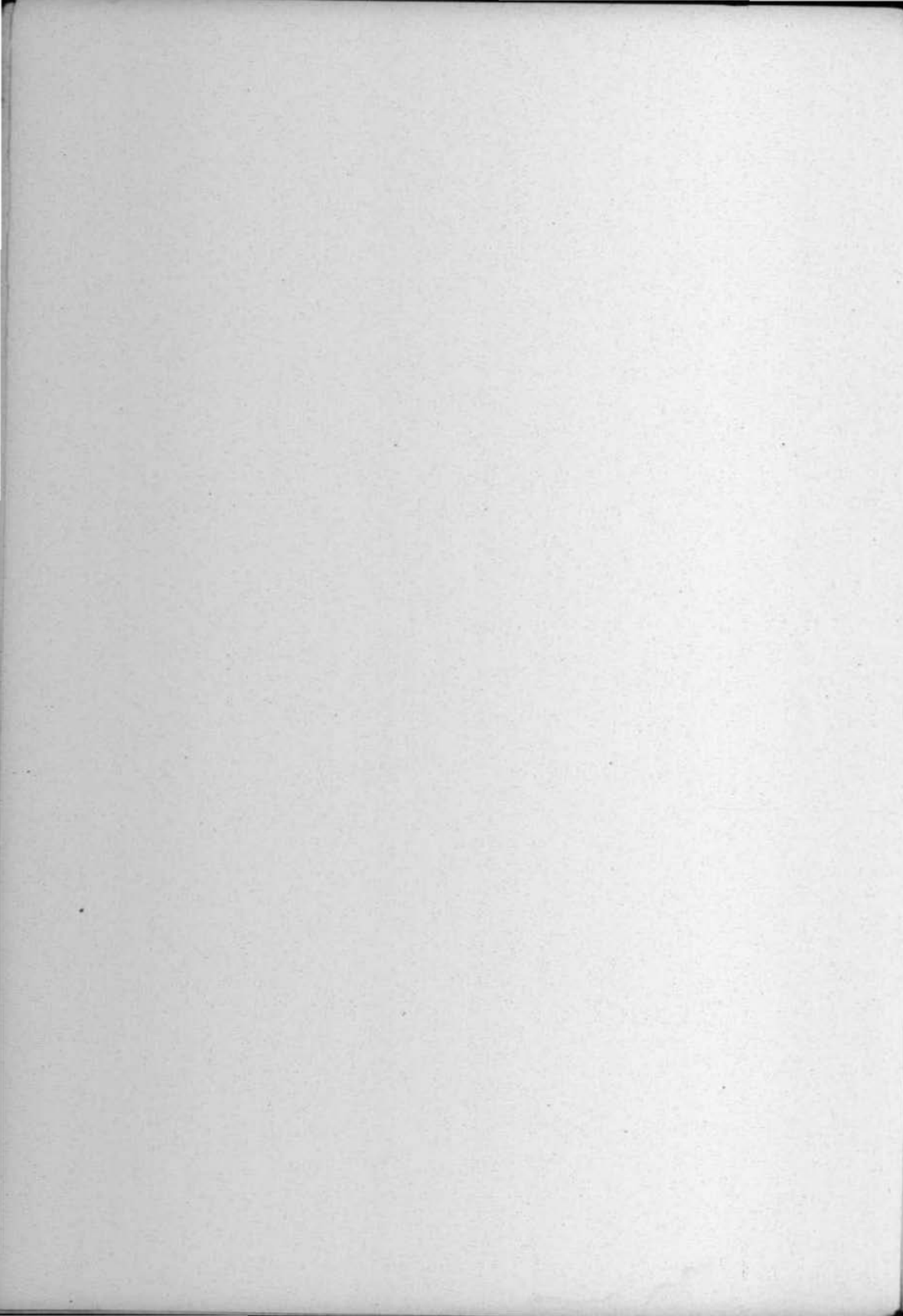
OF THE

FLORIDA STATE HOSPITAL

CHATTAHOOCHEE, FLORIDA



FOR THE PERIOD BEGINNING
JULY 1, 1936 AND ENDING JUNE 30, 1938



GOVERNING BODY
BOARD OF COMMISSIONERS OF STATE INSTITUTIONS
TALLAHASSEE, FLORIDA

Fred P. Cone, Chairman	<i>Governor</i>
R. A. Gray	<i>Secretary of State</i>
J. M. Lee	<i>Comptroller</i>
Cary D. Landis* }	
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Nathan Mayo	<i>Commissioner of Agriculture</i>
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Colin English	<i>State Superintendent of Public Instruction</i>
W. B. Cone	<i>Secretary to the Board</i>

J. H. Therrell	<i>Superintendent</i>
Chattahoochee, Florida	

*Deceased

TRANSMITTAL

*To the Board of Commissioners of State Institutions
Fred P. Cone, Governor—Chairman
Tallahassee, Florida*

GENTLEMEN:

Transmitted herewith is report of the Florida State Hospital for the biennium July 1, 1936—June 30, 1938.

May I thank each member of your Board, each supervisor and employce of the hospital for their support and cooperation.

It has been the purpose of your superintendent to operate and direct the institution as a Hospital.

The Patient has been the first consideration. His care, comfort, treatment and rcstoration to society has been the objective around which all activities have centered.

AS OF JUNE 30, 1938.

10,118	Acres of land is owned by the State for the operation of its hospital at Chattahoochee.
270	Buildings are in use by your Hospital.
4,268	Patients are present in the Hospital.
385	Patients are absent on furlough.
247	Prisoners are on assignment from the State Prison at Raiford for work at the Hospital.
848	Persons are employed by the Hospital in its various departments.
1,441	Is the number of dependents of our employed personnel.
\$2,208,316.83	Was expended for maintenance of the Hospital during the biennium.
\$.67	Per patient per day has been the cost of maintaining your institution. This amount has fed, clothed, treated, nursed, furnished laundry, heat, light and water for the patients and employees, operated your farms,

and utilities, paid all salaries and wages and taken care of all expenses of every nature and kind except capital additions to the Hospital plant.

\$ 43.50 Has been the average monthly salary paid employees during this biennium.

This is a record of which we are not proud but has been necessary on account of limited available funds.

1,782 Patients have been admitted to the Hospital during the past two years.

1,355 Patients have been furloughed or discharged as improved or restored during the two year period.

583 Patients have died in the two years which is approximately 50% of the past ten year average death rate.

We need and recommend for the ensuing biennium.

\$ 1.25 Per patient, actually present, per day. This amount to cover all expenses except capital additions to plant.

1 Recreation work—therapy building to take care of 1000 patients.

1 Nursery building to care for 300 bedridden aged patients.

1 New ward building to house 300 White Male patients.

1 New ward building to house 300 Colored Male patients.

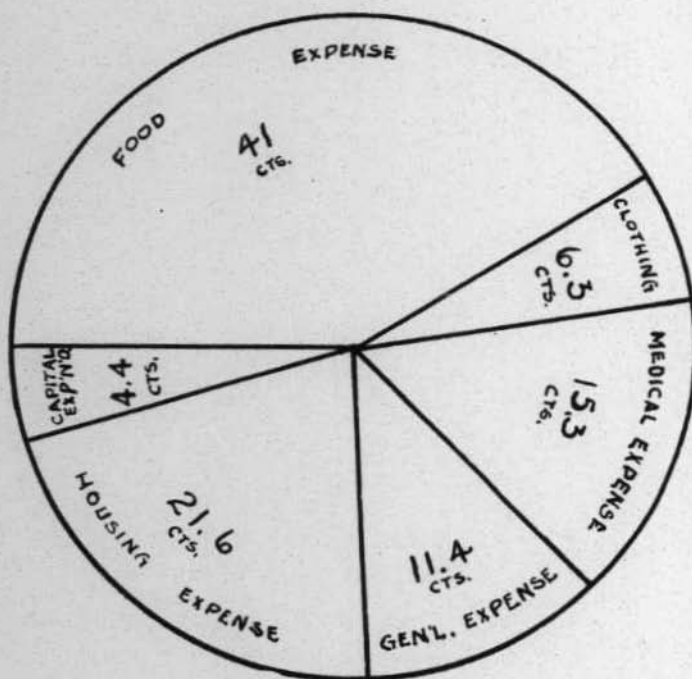
1 Wing added to New General Hospital to provide operating room, laboratory, physical therapy, X-ray and drug room space.

Respectfully submitted,

J. H. THERRELL
Superintendent.

EXPENDITURES 1936-37

\$1,134,879.58

*Each Dollar Was Spent**For*

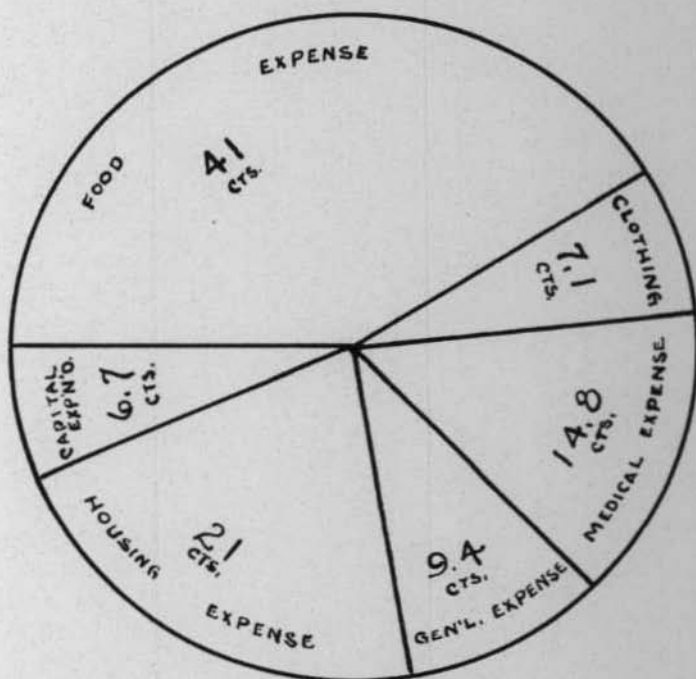
4,082-PATIENTS

791 EMPLOYEES

EXPENDITURES 1937-38

\$1,203,413.81

*Each Dollar Was Spent
For*



4,229-PATIENTS
830 EMPLOYEES

HISTORICAL STATEMENT

The site chosen in 1876 for the establishment of the Florida State Hospital has a history reaching back to many of the early decisive episodes in the state's history. Near the junction where the Chattahoochee and Flint Rivers form the Apalachicola, the location now occupied by the hospital, 240 feet above sea level, was for many years a strategic military point, forming the gateway from the Gulf to Georgia, Alabama and northern Florida. For a century Chattahoochee furnished the battle ground on which the French, the Spanish, the British, the Seminole Indians and the United States Government carried on a struggle for the occupancy of the surrounding territory. Many of the details remain obscure, but historical research is beginning to unfold the dramatic early story of Chattahoochee.

Held during the Seminole wars by the Indians, allied with negro freedmen and runaway slaves, the old fort at Chattahoochee was destroyed by Andrew Jackson, who followed by building a garrison for federal soldiers. In 1866 the arsenal and the surrounding land, part of which was in Georgia, were ceded by the federal government to the State of Florida and in 1876 converted into a state mental institution. Five of the main buildings of the hospital are over a hundred years old, having been erected in 1834. The tower of the fort remains a part of one of the ward buildings, the old magazine is now in use as a mattress factory, and General Jackson's residence serves as the superintendent's home.

The three score years which have passed since the establishment of the Florida State Hospital have seen its transformation from an "asylum" where the mentally ill were merely locked up for the protection of society, to a hospital applying modern therapeutic methods for the restoration of mental health. This process of change has gathered momentum in recent years, for the use of medicine in the treatment of mental diseases is a story of the past quarter century, and only during the last decade has such treatment been introduced to any extent in state hospitals.

At the same time that the institution has been extending its medical activities and raising its psychiatric standards, it has been necessary to expand the physical plant and equipment because of the rapid increase in patient population and because the old buildings are now becoming obsolete. During the past two years eleven new buildings have been completed with the aid of federal funds, but there is still need, in some instances critical, for additional structures. It is the view of the present administration that the need for additional housing should not eclipse the necessity of enlarging on the truly therapeutic functions of the hos-

pital. The patient population can be reduced, and the necessity of a continuing building program can be obviated only by receiving and treating patients in the early stage of mental illness, restoring them to society, and relieving the state of the burden of their maintenance.

THE SCOPE OF THE INSTITUTION

The Florida State Hospital operates as an agency which undertakes the treatment of the mentally ill, their restoration to health and return to society. Its function is primarily medical and it is first of all a hospital. But with a population of 4300 patients, 350 prisoners, and 860 employees with their dependents, living and working in some 270 buildings on a reservation of more than 10,000 acres, the hospital has the scope of a community demanding practically all the activities and services of a fair-sized municipality. Because of its relative isolation, the institution must be self-sustaining in many respects, hence the operation of numerous productive enterprises and the stocking of great quantities of supplies.

Something of the breadth of the hospital's work may be viewed in a list of the various departments operated in addition to the medical department and its sub-divisions:

Administration	Power Plant
Cost Accounting Dept.	Electric Plant
Trust Department	Electric Shop
Post Office	Water Works
Telephone System	Ice Plant
Telegraph System	Foundry
Radio System	Machine Shop
Sanitary Department	Plumbing Department
Fire Department	Garage
Commissary	Mattress Factory
Drinkstand	Sewing Room
Vegetable Farm	Ward Supplies and Equipment
Poultry Farm	General Kitchen
Dairy	Laundry
Hog Farm	Occupational Therapy Dept.
Canning Plant	Art Room
Horticulture Dept.	Recreation Department
Construction Dept.	Chaplain
Carpenter Shop	Beauty Parlor
Saw Mill	Barber Shop

COST ACCOUNTING

The accompanying report by the Cost Accounting Department for the two year period under review reveals a reduction in per diem cost for maintenance per capita from \$.7021 to \$.6816. This represents a saving of \$86.70 per day in cost of operation of your institution, or a total of \$31,644.50 for one year.

Without a lowering of standards, savings have been effected in many departments of the institution. The economy measures adopted are indicated in the reports covering those departments for month of June, 1937 and 1938. The total effect is seen in the reduction of food costs from \$.3207 in June, 1937 to \$.3150 in June, 1938, clothing costs from \$.0436 to \$.0258, and administrative costs from \$.0817 to \$.0765.

The reduction of administrative costs has been made in spite of the addition of the fire department, which during the second year of the biennium added some \$300 per month to the cost of administration. A prominent source of the economy is seen in a \$3,130.29 reduction in the administration pay roll. No salaries have been cut and some have been raised, but the personnel has been increased. A saving of \$120 per month in the transportation of patients, and the reduction of costs of the productive departments are contributory.

Some of the economy effected has been counteracted by failure to take advantage of discounts for prompt payment of invoices. Approximately \$300 has been lost each month since the state got behind with invoices on discounts alone, while the seller has added the necessary carrying charges to our monthly purchases thus again increasing the cost of the operation of the Hospital.

FINANCIAL STATEMENT

BALANCE SHEET—JUNE 30, 1938

Current:

Cash on hand and in Bank	\$		\$	8,411.88
Accounts Receivable—Employees		48.04		
Accounts Receivable—Others	10,663.26			
Less Reserve for doubtful accts.	5,667.56	4,995.70		
Due from Comptroller		13,628.32		
State Treasurer (Earmarked for new Bldgs.)	70,000.00			
State Treasurer (Replacement Fund) ..	77,905.00	147,905.00		
TOTAL ACCTS. RECEIVABLE	\$	\$	\$	166,577.06
Inventories: Supplies		214,230.08		
Hogs		7,907.00		
Poultry		6,066.85		228,203.93
TOTAL CURRENT ASSETS	\$	\$	\$	403,192.87

Fixed:

Land & Improvements	\$	\$ 211,967.83	\$
Buildings & Structures	2,272,799.01		
Less Depre. Reserve	35,878.73	2,236,920.28	
Machinery & Equipment	575,180.03		
Less Depre. Reserve	85,775.66	489,404.37	
Groves & Orchards	6,031.40		
Less Depre. Reserve	523.41	5,507.99	
Horses & Mules	4,625.00		
Less Depre. Reserve	1,283.69	3,341.31	
Dairy Herd	14,470.00		
Less Depre. Reserve	2,795.36	11,674.64	
New Power Plant (Incompleted)		94,318.34	
Other Incompleted Projects		10,887.73	
TOTAL FIXED ASSETS			\$3,064,022.49
Deferred Charges			91,099.05
Total Assets			\$3,558,314.41
Surplus—Capital Investment			\$3,558,314.41

COMPARATIVE MAINTENANCE STATEMENT—JUNE 30, 1938

	1938			1937		
	<i>Total Costs</i>	<i>Per Diem</i>	<i>Per Cent</i>	<i>Total Costs</i>	<i>Per Diem</i>	<i>Per Cent</i>
Food	\$ 495,240.15	\$.3208	47.07	\$ 469,625.49	\$.3152	48.02
Clothing	52,421.22	.0340	4.98	30,334.54	.0204	3.10
Medical	150,929.76	.0978	14.35	144,725.90	.0971	14.80
Admin. & Gen.	107,269.88	.0695	10.20	118,148.70	.0793	12.80
Housing	246,236.48	.1595	23.40	215,150.56	.1444	22.00
TOTALS	\$1,052,097.49	\$.6816	100.00	\$ 977,985.19	\$.6564*	100.00
Ave. No. Patients		4,229			4,082	

*Low Cost of \$.6564 per day per patient was occasioned by a change in accounting methods.

This would have been about \$.7021 on the present basis.

SUMMARY OF PAY ROLL DISTRIBUTION

	Year Ending 6-30-38		Year Ending 6-30-37	
	<i>Amount</i>	<i>Avg. No. Employees</i>	<i>Amount</i>	<i>Avg. No. Employees</i>
Food Expense	\$ 33,808.01	94.42	\$ 32,252.19	94.42
Professional Care	100,358.86	147.33	93,584.53	132.00
Admin. & Gen.	55,085.65	62.34	58,215.94	60.83
Housing	110,581.49	303.33	99,993.71	278.67
Productive Depts.	151,672.94	222.50	149,599.65	225.17
TOTAL	\$ 451,506.95	829.92	\$ 433,646.02	791.09

TRIAL BALANCE—GENERAL LEDGER—JUNE 30, 1938

	1938	1937
<i>Debits</i>		
Cash	\$ 1,659.35	\$ 1,425.51
Bank	6,752.53	3,735.07
Accts. Receivable—Emps.	48.04	6,491.27
Accts. Receivable—Others	10,663.26	13,487.67
Stores—General	45,288.07	42,509.79
Inventories	39,491.53	39,019.00
Stores—Departmental	129,450.48	134,465.51
Groves & Orchards	6,031.40	14,818.00
Live Stock Inventory	4,625.00	5,000.00
Dairy Herd	14,470.00	13,067.00
Hogs	7,907.00	6,763.00
Poultry	6,066.85	6,043.90
Land	201,542.93	200,763.19
Ground Improvements	10,424.90	4,071.79
Machinery & Equipment	575,180.03	482,977.47
Buildings & Structures	2,272,799.01	1,695,322.17
Food Expenses	495,240.15	469,625.49
Clothing & Shoes	52,421.22	30,334.54
Professional Care	167,379.39	159,329.24
Admin. & General	112,698.62	125,289.79
Housing	246,236.48	215,150.56
Productive Depts.	506,941.14	542,913.43
State Treasurer	122,739.86	163,660.13
Comptroller	13,628.32	1,178.27
New Construction (Incompleted)	105,206.07	10,401.42
Deferred Charges	91,099.05	80,520.41
Frt. & Express allowed	318.10	438.60
Total Debits	<u>\$5,246,308.78</u>	<u>\$4,468,802.22</u>

Credits

Clearing Accounts	\$ 52.31	\$ 51.53
Issues	506,941.14	542,913.43
Profits on Stores Sales	1,775.09	3,139.55
Pay Patients	16,449.53	14,603.34
Purchase Discounts	2,590.71	2,832.00
Rental Income	825.80	757.97
Miscel. Income	555.24	850.17
Reserve for Deprec.	126,256.85	92,788.40
Reserve for Doubtful Accounts	5,667.56	4,492.18
Total Expenditures	1,326,342.40	1,204,038.46
Surplus—Capital Investments	3,258,852.15	2,602,335.19
Total Credits	<u>\$5,246,308.78</u>	<u>\$4,468,802.22</u>

PWA CONSTRUCTION

The acutely congested condition of the hospital wards and the general housing problem has been somewhat relieved during the biennium with the completion of eleven major buildings with the assistance of federal funds. The structures, all completely fireproof, are designed and built to conform with the needs of a modern mental hospital. The new buildings include: tuberculosis hospital, general hospital, white female ward building, colored female ward building, diet kitchen, bachelor doctors' quarters, apartment building, men's dormitory, nurses' home, and underground corridors connecting the general hospital buildings.

THE PRODUCTIVE DEPARTMENTS

Efficiency and economy in the operation of the productive and maintenance departments are essential to the success of the institution in its main objective as a hospital. It has been undertaken during the biennial period now closing to reduce costs of production, to consolidate activities where increased efficiency will result, to expand profitable enterprises and curtail or abandon those found to be unprofitable. Cost accounting reports have indicated that measurable progress has been made toward this end during the two year period covered by the report.

Construction:

The activities of the construction department include a limited amount of heavy construction, numerous light construction jobs, the manufacture of furniture, all remodeling, repairing and painting, surveying, and the handling of insurance records.

The construction department operates as formerly except that the casket factory has been discontinued because of its high cost of production in comparison with mass production prices; and the carpenter shop has taken over the functions of the industrial shop with the exception of repairing iron beds which is now handled at the foundry. Formerly the carpenter shop and the industrial shop did much the same type of work and as a result of the consolidation the overhead and clerical expenses have been greatly reduced. New efficiency methods together with the elimination of non-essential tasks have brought carpenter shop costs from \$5,272.55 the first year of the period to \$4,959.12 for the second year.

Heavy construction completed during the two year period includes the erection of a fire station, a two-story brick structure which compares favorably with recently completed fire department buildings in cities of

15,000 population. The laying of a concrete foundation for the new power addition and the laying of a concrete duct from the power plant to the new general hospital are other items of heavy construction.

Light construction and remodeling have included construction of the fire chief's home, remodeling of the old industrial shop for the mattress factory, remodeling and repair of the dining rooms, additions to the prison camps, remodeling of the superintendent's residence, construction of recreation yard with drainage system and terraces for the white male department, erection of garages and other items.

Activities of the sawmill have been curtailed because the preponderance of construction during this period has been with concrete and brick, rather than frame. With decrease in production the operating costs increase, and it has at times been cheaper to buy lumber. During the year 1936-37, 228,236 feet of lumber were cut and dressed, while during 1937-38 there were only 116,594 feet.

Cabinet work has continued as formerly with some reduction in jobs involving individual design and consequently high costs. The amount of painting has steadily increased as a result of the institution's program of sanitation, preservation and beautification. During the first year of the biennium 2,302 gallons of paint were used, the total for the second year being 3,095 gallons.

Engineering:

All needs of the institution which are mechanical in nature are handled by the engineering department, under which function the steam and electric plant, water works, refrigerating plant, plumbing department, foundry, machine shop, garage, electric shop, telephone system, radio and sprinkler system.

Steam and electric current are furnished for heat, cooking, laundry and driving refrigerating and other machines. The plant consists of one 520 H. P. Erie City boiler, one 300 H. P. & B & W boiler, two 500 H. P. B & W boilers with new unit pulverizers and one 750 K. W. Turbo-Generator, one 600 K. W. Turbo-Generator and one 250 H. P. Skinner Unaflo Engine connected to one 168 K. W. generator. The two 500 H. P. boilers were added during this period and an additional one was purchased but awaits installation. The 750 K. W. Turbo-generator was also added during the biennium.

The cost of producing electric current has been reduced from an average of \$.0176 per KWH in 1936-37 to \$.0134 in 1937-38. Economy has also been effected in consumption, in spite of the demands of the new

buildings. In 1936-37 the institution used 3,972,800 KWH, but in 1937-38 only 3,443,400, a reduction of 569,400 KWH during the year.

Water is now produced at \$.055 per 1000 gallons. The institution operates two water systems, producing a million and a half gallons of chlorine-treated water per day. A 1000 R.P.M. gas driven pump was installed during this period, but the two turbines are twenty-five years old and need replacement. If the institution were equipped with a treatment plant the operation of two systems and the use of chlorine would be no longer necessary.

The refrigerating plant furnishes the institution's ice needs and operates five cold storage rooms. At the present the plant is operating at a loss because of old and out-moded equipment. The addition of a seven-ton compressor during this period has been of considerable aid, however. By measure of economy the consumption of ice has been reduced from 3,567 tons in 1936-37 to 3,116 tons in 1937-38.

The plumbing and steam-fitting department has handled not only the maintenance of fixtures and repair work but all new installation except that done under contract in the new buildings. A steam tunnel has been run from the steam plant for a distance of 3000 feet up to the new buildings. The foundry and machine shop has during this period cast 77,575 pounds in iron, brass and aluminum, and in addition to the repair of machines has taken on the repair of iron beds which was formerly handled by the industrial shop. The garage has continued to maintain the institution's motor vehicles as formerly.

The telephone system has been enlarged to include twenty-five new telephones, but at present many more are needed. The radio system has been revamped and is being equipped with a microphone for local broadcasting.

The Farm:

The hospital now has 2,750 acres under cultivation, in addition to that used by the dairy, the hog farm, the poultry farm and the fruit groves. The farm is operated with the dual purpose of making the institution as self-sustaining as practical and reducing food costs where possible. Because of fluctuations in market prices and because of seasonal weather changes, at times costs of production exceed the theoretical costs of private enterprise, but as a whole costs have been held low enough to effect a saving to the institution.

During the summer of 1937 the extreme drouth brought unexpected and severe losses. The installation of the irrigation system contributed

to the production of a bumper crop the next season and intense canning gave the institution vegetables at unprecedented savings.

Expansion of the canning plant has enabled the institution to utilize throughout the year farm surpluses which were formerly sent to the hog farm. Using conservative pricing, the saving effected was \$1,755.17 during the period. During this season the plant has been operating twenty hours daily since March and is expected to close about August first. Efficiency methods have made it possible to can 62,000 gallon cans with only three out of that number having "gone bad."

We have endeavored to produce at the hospital dairy a higher grade milk at a lower cost. The herd is being improved with new foundation stock. Sanitation has been improved and the installation and use of a pasteurizer has insured pure milk. Costs have been reduced until milk is now produced and pasteurized at \$.22 per gallon or for six cents less than the current market price. With the production of a pure high-grade milk at a lowered cost now attained, it is planned to increase the dairy herd as rapidly as profitable. The institution now produces nine-tenths of the milk it consumes and as production rises it is intended to eventually increase milk consumption for the patients.

The hog farm continues to operate as one of the more profitable of the institution's productive units. Comparing costs with current prices of pork, a saving of \$11,724.38 has been effected in the operation of the hog farm during the two year period, 1031 hogs having been butchered.

Poultry production has been increased: 10,937 chickens are now on the farm as compared with 8,884 two years ago. Poultry is not produced at a profit at the present time, however, due to the fact that the poultry farm has been located too long in one place. It is proposed to move the poultry farm to a new location as soon as feasible.

Horticulture:

The two year period now closing has seen a number of major undertakings successfully handled by the horticulture department. The area between the disposal plant, the railroad track, the commissary road and the highway was formerly swampy, unhealthful and unattractive when viewed from the highway. Draining, terracing, sodding and shrub planting have transformed this area into a park. The horticulture department has handled the landscaping around all of the new PWA buildings and transplanted trees and shrubs from the park where the nurses' home was erected.

The lawn area has been increased from 78 to approximately 150 acres during this period. The lawn and 7000 ornamental shrubs have been

cared for and 65,000 cut flowers produced and sent to the general and hospital wards. The department has also handled 110 acres in fruit cultivation.

Laundry:

The hospital laundry continues an output of more than 300,000 pounds per month at a cost of \$.015 per pound. The plant is crowded and it is necessary to run a night crew in the finishing department. The old part of the building is between thirty and forty years old and is completely obsolete. Machinery is old and in need of replacements and repairs. A new building with new equipment would not only remove fire and mechanical hazards but would make it possible to reduce operating costs.

Mattress Factory:

Cotton donated to the institution by the FERA as a surplus commodity has enabled the hospital to manufacture mattresses and pillows at a minimum cost. A great quantity of this cotton remains unused and will supply the institution for some time to come.

When the industrial shop was consolidated with the carpenter shop the building was remodeled for use as a mattress factory. A new mass production machine which makes and remakes mattresses and pillows of a superior quality was installed and has operated with utmost satisfaction, taking care of all the hospital needs and supplying the Florida State Farm and Florida Farm Colony with mattresses.

Sewing Room:

The work of the sewing room has been reorganized in an effort to achieve economy in production. The total output is greater than two years ago and salaries have been raised, but the institution's clothing cost per capita per diem has been reduced. The most prominent source of economy is the elimination of the tailoring department and the making of men's clothing other than shirts. These items are now purchased.

Clothing for the women has been improved in material, design, variety of style and workmanship. Dresses for the colored female patients have been changed from homespun to gingham, and for the white female patients from gingham to prints with the use of a variety of patterns and colors.

DIETARY DEPARTMENT

General Kitchen:

As one of the largest kitchen units operated in this country, the hospital's general kitchen continues to handle a tremendous task. At the present time 15,300 meals per day are served.

The physical plant has seen a number of improvements during the two year period. A new employees' cafeteria is now nearing completion, affording a more attractive atmosphere than the old dining room. Remodeling of the other dining rooms is under way in an effort to relieve the overcrowded condition. A new vegetable house, and additional pantry and store rooms are in use.

Dietary improvement is evidenced in the use of more milk and eggs, an increase of 18 per cent in therapeutic diets, a better variety of meats, fewer starchy foods, and more fruit. At the same time per diem food cost has been reduced, as indicated in the cost accounting report. The United States Government has assisted with the donation of several thousand bushels of apples and oranges during this period. When fruit is high, vegetables with the same vitamin content are substituted. The cheapest foods are starchy, and a fruit or vegetable instead of a starchy food costs \$50.00 to \$75.00 more per meal, but pays in the greater health value.

Measures of sanitation, economy, safety and courtesy and concern for the patients have been put into force in the general kitchen with highly encouraging results.

Diet Kitchen:

The institution's general hospital of 341 beds is served by a diet kitchen, under the supervision of a registered dietitian who was added to the staff in December, 1936. Student nurses now convey the food to the various wards in steam heated carts, each hospital ward having been equipped with a serving room and a steam operated dishwasher. In these serving rooms, the trays are served under the direction of a graduate nurse. Special diets are sent out in special carts and are delivered directly to the bedside of the patient, allowing a choice in the food selected. The construction of underground tunnels connecting the three general hospital buildings have made it possible to serve the food in this manner.

The purchase of new carts and the construction of additional cold storage space have aided in the administration of the diet kitchen. Construction has been completed on a new, modern diet kitchen, completely equipped, which will be put into use in the near future. When the new

general hospital is occupied, it will be necessary for the diet kitchen to serve 100 more beds than at present, or a total of 441. In addition to patients in the hospital, fifty employees are served three times daily in the staff dining room.

The dietitian and the assistant dietitian serve as instructors in dietetics and diet therapy for the nurses training school, and supervise the practical experience which the students acquire by working in the diet kitchen.

SANITARY DEPARTMENT

As a means of economy and efficiency the police and sanitary department, the extermination department and the sewerage disposal plant have been combined into one department. With reduction of personnel and overhead expense this department now carries on a vastly greater amount of work, its functions including the removal of trash and swill, mosquito control, extermination of pests, operation of the sewerage disposal plant, street sweeping, operation of the information booth, and related duties.

The sewerage disposal plant began operation in the spring of 1937, resulting in a purer water supply for the surrounding country. The water is tested periodically. There is need for an additional clarifying tank, a digestion tank and a drying bed for the proper and efficient operation of the plant.

FIRE DEPARTMENT

Following the burning of the dry cleaning plant and the disastrous nurses' home fire, the establishment of a fire department was authorized at the institution. The department has now been in operation for one year and compares favorably with fire-fighting units in towns of 10,000 to 15,000 population. A two-story brick station was erected by the institution and has every modern feature. The equipment includes three fire trucks and the personnel four full time men, in addition to twenty volunteers. Regular inspection of buildings and fire drills are included in the department's routine.

STATE LIAISON OFFICER

In September, 1937, Mrs. Herberta Ann Leonardy was appointed State Liaison Officer to handle certain matters in which the efforts of the State Board of Public Welfare and the State Hospital should be coordinated. The choice of an attorney with experience in social work made it possible for one person to handle numbers of cases requiring both legal investigations and psychiatric social work. Since her appointment, the liaison officer has completed the following:

Psychiatric Reports	450
Complete Case Histories furnished	8
Old Age Assistance Cases Completed	14
Blind Assistance Cases Completed	2
Restoration of Legal Sanity Suits	22
Home Contacts for Patients	25
Home Adjustments	6
Jobs Secured for Patients	5
Furloughs Arranged	4
Legal Investigations	15

The liaison officer has been of great assistance to the hospital in her efforts to establish a library for patients and employees. The contribution of magazines and books by the Eastern Star and other organized groups has been obtained and the liaison officer distributes literature daily through the general wards. The loan of seventy-five books to the hospital afforded for the first time a collection of books for the use of the patients. This project met with such success that at the end of three months the books were returned and a new assortment sent in.

It is hoped that through the cooperation of philanthropic and civic organizations a permanent library may be gradually built up for patients and employees, thus filling a need of long standing at the hospital.

OCCUPATIONAL AND RECREATIONAL THERAPY

Occupation and recreation play an indispensable role in any program for the treatment of mental patients. In deteriorated and chronic cases, no more can be attained than to bring about a more satisfactory adjustment between the patient and his environment, which is a worthwhile objective in itself. But in new and more recoverable cases, occupation

or recreation may often be a large factor in the resocialization and rehabilitation of the patient.

Various types of occupation and group recreation have been afforded at the hospital for many years, but prescribed, individualized activities, in which the patient's progress is measured in terms of his mental improvement have been under way for only the past two or three years. It is intended that this scientific ordering of the patients time will gradually expand until it replaces entirely the older regime which has largely been controlled by the institution's labor needs and limited funds for therapeutical activities.

An occupational therapy department conducted along scientific lines under the direction of a registered occupational therapist was established three years ago. This work has been gradually expanded until it now serves a number of women and men patients. All insulin shock treated patients are given regular class instruction.

The work, which is progressive, is graded into five grades of difficulty, and is given according to the diagnosis and the mental and physical condition of the patient. It ranges from the simple task of rolling yarn into balls to the more difficult work of leather tooling or the weaving of intricate designs on the pattern loom.

The physician prescribes the treatment. The therapist receives the prescription, selects the suitable activity to get the desired results, keeps record of the reactions and progress of patient, and has frequent consultations with the physician.

The crafts which are used as treatment include: leather tooling, basketry, loom weaving, painting and designing knotted belts, wood-carving, braid weaving, hooked rugs, knitting, crocheting, embroidery, work in cork, work in clay, etc.

In the art room of the white female department many patients do fine needlework, this type of work being particularly beneficial for some types of mental disorders. The art room products are usually of a high quality and are often sold at a price sufficient to pay for the materials.

The occupational therapist gives instruction in occupational therapy to the student nurses as a regular course in their curriculum, and holds similar classes for the attendants. Various recreational activities have been inaugurated during the past two years. These include folk-dancing, dramas—special plays and musical comedies. The casts for these productions are composed entirely of patients and the costumes, properties and scenery are made in the occupational therapy department. Programs of

this sort are produced each month and given several times for patients and employees, approximately 400 patients attending one performance.

Under the auspices of the recreation department a weekly program is carried on, including the following: a moving picture show in five showings, two dances, two picnics, bridge and bunco parties, three band concerts, two religious services and broadcast of folk songs by the patient choir.

A new and complete radio system equipped with microphones and amplifier has been installed, making it possible to broadcast all religious services and musical programs. There are loud speakers in all wards, yards and dining rooms.

MEDICAL DEPARTMENT

STAFF

Ralph E. Stevens, M. D.	Chief Physician
W. D. Rogers, M. D.	Clinical Director
F. E. Daves, M. D.	Assistant Physician
W. G. Miles, M. D.	Assistant Physician
J. M. Schultz, M. D.	Assistant Physician
J. B. O'Connor, M. D.	Assistant Physician
C. B. Matthews, M. D.	Assistant Physician
J. C. Robertson, M. D.	Assistant Physician
J. C. Statham, M. D.	Assistant Physician
P. L. White, M. D.	Assistant Physician
O. W. Britt, M. D.	Radiologist
Philip Worchel, M. A.	Psychologist
A. F. Douglas, D. D. S.	Chief Dentist
R. P. Stubbins, D. D. S.	Assistant Dentist
G. E. Meade, D. D. S.	Assistant Dentist
E. L. Stephens, D. D. S.	Assistant Dentist
R. E. Morgan	Laboratory Technician
Mae Adams	Assistant Laboratory Technician
Gladys Moore	Assistant Laboratory Technician
Amorette Grimes	X-Ray Technician
Nellie Broome	Assistant E. E. N. T. Department
T. J. Hicks, Jr.	Pharmacist
Dora Fulgham, R. N.	Supervisor of Nurses
Luta Bowen, R. N.	Assistant Supervisor of Nurses
Elsie Moog, R. N.	Director, School of Nursing

VISITING STAFF

J. G. Lyerly, M. D.	Neurosurgeon
J. C. Davis, M. D.	Urologist
Mark F. Boyd, M. D.	Malaria Research
S. F. Kitchen, M. D.	Malaria Research

CONSULTING STAFF

Ralph Greene, M. D.	Neurologist
H. Mason Smith, M. D.	Neuro-psychiatrist
W. H. Spiers, M. D.	Neuro-psychiatrist
W. C. McConnell, M. D.	Psychiatrist

CHIEF PHYSICIAN'S REPORT

*To the Superintendent
Florida State Hospital*

SIR:

Submitted herewith is a report of the medical activities, progress, and conditions of the Florida State Hospital for the biennial period beginning July 1, 1936 and ending June 30, 1938.

The major accomplishments of the Medical Department during this period may be listed here briefly, to be supported by statistical data in the more detailed report which follows:

1. The greatest single advance made during this period is believed to be the eradication of the amoebic dysentery endemic of many years standing at the institution. In July, 1936, there were approximately two hundred cases, confined in four isolation wards. Plans had been made to construct special buildings for their care. Active and intensive treatment, together with removal of all possible sources of infection, in twelve months brought the incidence down to three cases. As the biennial period now closes, there are no active cases of amoebic dysentery in the institution. The isolation wards have been discontinued and are used for other purposes.
2. New forms of therapy have been introduced in the treatment of mental illness with encouraging results. The use of insulin shock therapy and metrazol shock therapy in the treatment of dementia praecox, and the employment of neurosurgery in cases of agitated depression have been instituted during this period. Other forms of therapy, notably malarial therapy, have continued to progress, and the benefits of occupational and recreational therapy have been expanded.
3. The rising mental recovery rate is pointed out as a progressive trend, which may be expected to be increasingly evident in future years, when the treatments instituted in the recent past are expanded and their results can be measured with statistical reliability.
4. The level of general health of the patient population has been raised. This is shown most clearly in the conspicuous reduction in the death rate effected during the two year period. General medical attention, indicated surgery, and hospital care have been systematically improved and expanded.

5. Standards have been elevated in the staff of the medical department. The appointment of a consulting staff, including prominent Florida psychiatrists, neuropsychiatrists, and neurologists, together with the employment of a neurosurgeon of outstanding ability, and a visiting urologist, have made notable additions to the personnel. While limited funds have prohibited an increase in the resident staff during the biennium, four additional physicians have recently been appointed, to report for work in July, 1938, the first month of the coming biennium. At the present time the staff includes five physicians with from three to ten years experience in psychiatry. The addition of a full-time radiologist, a psychologist, a registered dietitian and assistant, and a fully trained and qualified Director, School of Nursing should be noted. The staff of registered nurses has been increased from eleven to seventeen during this period.
6. The medical and psychiatric library has been modernized and trebled in size, enabling members of the staff to keep in constant touch with new developments in their respective fields.

A definite objective for the coming biennium is to have the hospital qualified by the American College of Surgeons, and to have the School of Nursing approved by the National League for Nursing Education.

Psychiatry has been the backward child of medicine, and until very recent years the public has been given small reason to invest in more than custodial care for its mentally ill. But with the promise given us by current advances in therapy, and with the rapid revision of public thought in regard to mental hospitalization, we may look forward to the evolutionary growth of a state hospital which will successfully treat and restore its patients to healthful, normal living.

Appreciation is extended to the Superintendent for your constant cooperation, particularly in procuring the physical equipment and drugs which have been needed from time to time in the treatment of our patients. The support of the medical staff and the interest of the Board of Commissioners of State Institutions in the medical activities of the institution have also been essential to whatever progress may have been attained during the period covered in this report.

Respectfully submitted,

RALPH E. STEVENS, M. D.,

Chief Physician.

MOVEMENT OF POPULATION

The population reports of the hospital reveal a number of significant trends operating during the biennial period. The history of the institution has shown a steady rise in the average patient population, reaching a peak in the last biennial average of 4,138.12 and again in the last annual average of 4,229.25 with an all time peak of 4,271 on April 27, 1938. An attempt to forecast whether this trend will continue in the future encounters many difficulties because of the complex factors at work, many of them contradictory.

Total admissions during the year 1937-1938 were somewhat lower than the previous year, and the recovery rate was higher. Yet the average population continued to rise, a situation which is explained by the fact that the death rate for the institution was reduced by 14.6 per cent over the previous year.

Decline in Death Rate

Although fluctuating from year to year, the death rate of the patient population has shown a notable decline over the past decade. Table No. 5 shows the death rate over a period of twelve years, computed according to the procedure recommended by the National Mental Hospital Survey Committee. This method relates the total number of deaths during the year to the total number of patients under treatment during the year, that is, the number remaining at the close of the year plus discharges, furloughs and deaths. This ratio is expressed by a rate per 1000 under treatment. The rate of 58.1 for the closing biennial period indicates a reduction of 15.73 per cent from the rate of 68.95 for the previous biennium. The encouraging trend of the entire table may be grasped when it is observed that the death rate of the institution has been more than cut in half in ten years.

The greatest single explanation that can be offered for this phenomenal reduction in deaths is the year by year improvement in medical attention, hospital care, and sanitation.

Recovery Rate

While the reduction in the death rate is prominent in raising the level of the patient population, the rising recovery rate tends to decrease the population. There seems to be no absolutely valid index to the rate of mental recovery or remission, but a fairly reliable measurement may be found in the ratio between releases and admissions. Combining discharges and furloughs, this method takes the percentage ratio of releases

TABLE NO. 1
ADMISSIONS FOR THE PERIOD JULY 1, 1936 TO JUNE 30, 1937

	Patients in Hospital	Admitted by Birth	Admitted on Commitment	Returned from Furlough	Returned Escapes	Admitted House Bill 329	Admitted Drug Addict, Acts 1935	Drug Addicts	Admitted by Authority of Board	From Florida Farm Colony	Returned Escape on New Commitment	Returned Furlough on New Commitment	From Florida State Farm, Raiford	Returned Furlough Adm. House Bill 329	Discharge Revoked and Readmitted	From Other States
July	4,012		96	12	3			1		1	1					1
August	4,031	1	69	12	7			1								
September	4,043		81	17	3	1			1	4						
October	4,043		79	10	7					1		1		1		2
November	4,063		41	8	1					3						
December	4,043		79	5	4								2			3
January	4,062		109	7	2					1		1				1
February	4,101	1	83	9	3			2			1					2
March	1,130	1	43	12	4											
April	4,110	1	65	11	6			3					2			1
May	4,131	1	73	8	5			1	1			1				1
June	4,144		47	13	3	1	1			1			1		1	1
TOTALS		5	865	124	48	2	1	8	2	11	2	3	5	1	1	12

TABLE NO. 2
ADMISSIONS FOR THE PERIOD JULY 1, 1937 TO JUNE 30, 1938

	Patients in Hospital	Admitted by Birth	Admitted on Commitment	Returned from Furlough	Returned Escapes	Admitted House Bill 329	Admitted Drug Addict, Acts 1935	Drug Addicts	Readmitted on Former Commitment	Admitted by Authority of the Board	Admitted to be Transferred to St. Louis, Mo.	From Florida Farm Colony	Recommitted from Tuskegee, Alabama	Returned Escape on New Commitment	Returned Furlough on New Commitment	Returned Furlough—Adm. House Bill 329	From Other States
July	4,144		72	9			2							1			
August	4,154		95	13	1				1			1		3			
September	4,204	1	76	13	3		1	1	2								3
October	4,228	1	62	8	2				2								2
November	4,233		70	10	2				1						1		
December	4,253	2	36	12	2	1							1	1			1
January	4,214		79	15	1				5	1							
February	4,234		76	7	2				1						1		1
March	4,246		63	8	2		1		2			2					1
April	4,242		74	15					1								1
May	4,263		52	13					2	1	1					1	1
June	4,257	1	64	12	2				1					1			2
TOTALS		5	819	135	17	1	4	1	18	2	1	3	1	6	2	1	12

TABLE NO. 3
RELEASES FOR THE PERIOD JULY 1, 1936 TO JUNE 30, 1937

	Discharged	Died	Furloughed	Escaped	Released—Admitted House Bill 329	Babies Sent Home	Discharged to State Prison Farm	Transferred to U.S. Veterans Hospital	Discharged Voluntary Drug Addict	Discharged Admitted Authority of Board	Transferred to Boys' Industrial School	Transferred to Florida Farm Colony	Babies Dying	Transferred to Other States	Remaining
July.....	6	44	39	7											4,031
August.....	3	28	35	11							1				4,043
September.....	6	35	53	5	1		1					2		4	4,043
October.....	8	21	40	9	1					1		1			4,063
November.....	10	20	33	4			1					3		2	4,043
December.....	13	19	34	5		1								2	4,062
January.....	21	27	29	3					1					1	4,101
February.....	10	21	17	5	1	2	1	14						1	4,130
March.....	7	37	27	8										1	4,110
April.....	10	16	28	8		2		2		1				1	4,131
May.....	13	23	33	7				1					1		4,144
June.....	9	20	27	6		1				1		1		4	4,144
TOTALS.....	116	311	395	78	3	6	3	17	1	3	1	7	1	16	

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TABLE NO. 4
RELEASES FOR THE PERIOD JULY 1, 1937 TO JUNE 30, 1938

	Discharged	Died	Furloughed	Escaped	Escaped—Admitted House Bill 329	Released—Admitted House Bill 329	Deported	Babies Sent Home	Discharged, Sanity Having Been Restored by Circuit Court	Discharged to State Prison Farm	Transferred to U.S. Veterans Hospital	Furloughed—Admitted Drug Addict, Acts 1935	Discharged to Obtain Old Age Assistance	Discharged to Obtain Blind Assistance	Transferred to Florida Farm Colony	Babies Dying	Transferred to Miami Retreat	Discharged—Delivered to Narcotic Division	Transferred to Other States	Remaining
July	3	21	40	1	-----	1	-----	-----	-----	1	2	-----	-----	-----	-----	-----	1	-----	4	4,154
August	10	19	29	2	-----	-----	-----	-----	-----	1	1	-----	-----	-----	1	-----	-----	1	-----	4,204
September ..	6	21	41	4	1	1	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1	4,228
October	6	28	31	3	-----	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	-----	-----	-----	3	4,233
November	2	21	32	3	-----	-----	1	-----	-----	-----	-----	1	2	-----	-----	-----	-----	-----	2	4,253
December	6	28	52	1	-----	-----	-----	-----	-----	-----	4	2	-----	-----	-----	1	-----	-----	1	4,214
January	10	24	40	2	-----	-----	-----	-----	-----	2	-----	-----	2	-----	-----	-----	-----	-----	1	4,234
February	10	20	30	6	-----	-----	-----	1	-----	1	-----	-----	6	-----	-----	-----	-----	-----	2	4,246
March	5	31	38	4	-----	1	-----	-----	-----	-----	1	-----	-----	-----	3	-----	-----	-----	-----	4,242
April	5	24	35	2	-----	-----	-----	-----	-----	-----	-----	-----	2	1	-----	-----	-----	-----	1	4,263
May	7	13	48	1	-----	-----	-----	-----	-----	-----	3	-----	3	-----	-----	-----	-----	-----	2	4,257
June	8	22	38	1	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	2	4,268
TOTALS	78	272	454	30	1	3	2	1	1	6	11	3	15	1	4	1	1	1	19	-----

TABLE NO. 5
DEATH RATE AT THE FLORIDA STATE HOSPITAL
OVER A PERIOD OF TWELVE YEARS

Fiscal Year	Patients Treated During Year	Deaths During Year	Death Rate per 1000 Patients
1937-38	5072	272	53.6
1936-37	4966	311	62.6
1935-36	4723	299	63.3
1934-35	4877	364	74.6
1933-34	5111	460	90.0
1932-33	5083	433	85.2
1931-32	4907	384	78.2
1930-31	4865	461	94.7
1929-30	4509	457	101.4
1928-29	4375	435	99.4
1927-28	4005	451	112.6
1926-27	3606	400	110.9

to the total number of admissions, including returns from furlough. The total of admissions rather than the average population is used for the reason that releases are found to correlate more closely with admissions than with population. Chronic cases who have been in the hospital for many years are usually removed by death rather than release, while furloughs and discharges as a rule are granted to more recently admitted patients. It should be clear, however, that the use of such a ratio does not assume that the admissions and releases represent the same patients, but merely that a statistical relationship exists.

Because of marked fluctuations in the ratio from time to time, the general trend may best be seen over periods of several years. In recent years such fluctuations have been caused on two or three occasions by the necessity of curtailing or altogether halting admissions for a period of time.

During the four year period 1930-34, the ratio of releases to admissions was 43.9 per cent, and during the four year period 1934-38 it was 51.9 per cent, the figure for the final year, 1937-38 being 53.3 per cent. It is felt that this gradual rise in the ratio of releases to admissions may be taken as a fairly reliable indication of a higher recovery rate. If the institution is enabled to expand the new forms of treatment already introduced, we may expect a continued rise of the recovery rate in future years.

Falling Age Level

A marked change in the age level of the general patient population has been taking place during the last fiscal year, a change which carries significant implications for the future conduct of the institution and the type of hospitalization which should be maintained. The coming of old age assistance appears to be one factor in explaining the sudden appearance of this trend. The hospital population was tabulated according to age groups as of April 27, 1937 and again as of June 30, 1938, with the following results:

	<i>April 27, 1937</i>	<i>June 30, 1938</i>
Below 30 Years of Age	656	774
30 to 40 Years of Age	929	1005
40 to 50 Years of Age	957	979
50 to 60 Years of Age	876	840
Over 60 Years of Age	709	670

During this 13 month period there was a drop of 5.5 per cent in patients over the age of sixty, which would not appear significant except when consideration is given to the counteracting force of a 14.6 per cent reduction in the death rate during this year. The reason for stating that this trend has taken place in spite of a lowered death rate, rather than interpreting it as a cause of the reduction in deaths, is that while the death rate has shown a steady drop over a period of years, as is indicated in Table No. 5, the decline in aged patients has been a noticeable tendency only during the past year. While 15 patients have been discharged to obtain old age assistance, the situation is more clearly exhibited in the admission of senile patients. In the year 1934-35, 119 patients were admitted with a diagnosis of senile psychosis. In 1935-36 there were 110 of such admissions, and in 1936-37 there were 103. This constituted a steady but almost imperceptible decline. The sudden swing downward occurred in 1937-38, when the admission of senile patients dropped from 103 to 58 patients, a 44.6 per cent reduction, as is indicated in Table No. 6.

While the influence of a declining age level will undoubtedly be seen in a further reduction of the death rate, it has not been a prominent factor until the past year, and in view of the rapidity with which the death rate has fallen during the last decade, the importance of a lowered age level as a cause of the reduction in deaths should not be overestimated.

Admission of Younger Patients

A second tendency to be seen in the age group comparisons is the growth of all the age groups under thirty years. In April, 1937, there were 656 patients under thirty years of age in the hospital, while in June,

1938, there were 774, a rise of 17.9 per cent. It is felt that this trend should not be interpreted as evidence of an increasing incidence of mental disease, but rather as evidence that people are more readily submitting to mental hospitalization than in former years.

There is considerable justification for such an interpretation. Encouraging results of the new insulin and metrazol shock therapies and of malarial therapy have played a large part in revising prevalent notions with regard to mental hospitals. It is no uncommon occurrence at the present time for patients or their families to confer with the hospital staff regarding prospects for treatment, before undergoing the process of commitment. In former years a state mental hospital was turned to as a last resort, in fear and embarrassment, or with resigned acceptance of life-long confinement. But a wider knowledge of the nature and treatment of mental disease has succeeded in impressing the public mind with the importance of hospitalization in the early stage of the illness, before the condition has become incurable.

Dementia Praecox Admissions

The admission of younger patients correlates with the increase in cases of dementia praecox, a mental disorder beginning in adolescence or young adulthood. A recent check over a period of twelve months revealed that dementia praecox was responsible for 53.1 per cent of psychoses among men admitted under 30 years of age, and for 32.5 per cent of women in the same age group. Early admission of these cases facilitates recovery, as the treatments so far instituted prove most effective in the first year of the illness.

An interesting trend is seen in the decrease of psychoses due to syphilis in contrast with the increasing admission of dementia praecox cases. Figures for the past four biennial periods are as follows:

	<i>Psychoses due to Syphilis</i>	<i>Dementia Praecox</i>
1930-32	417	275
1932-34	343	302
1934-36	250	320
1936-38	240	385

The incidence of neurosyphilis appears to have passed its peak, and for some years to have been on the decline. If the campaign inaugurated by the U. S. Public Health Service for early treatment of syphilis meets with success we may expect a more marked decline in future years.

The treatment of neurosyphilis by malarial therapy at the Florida State Hospital has met with widely acclaimed success. Instituted in 1931, the therapy is financed and administered by the Rockefeller Foundation.

TABLE NO. 6
PSYCHOSES OF FIRST ADMISSIONS

	JULY 1, 1936, TO JUNE 30, 1937					JULY 1, 1937, TO JUNE 30, 1938				
	W.M.	W.W.	C.M.	C.W.	Total	W.M.	W.W.	C.M.	C.W.	Total
Traumatic Psychosis	4	1			5	2		1		3
Senile Psychosis	64	17	10	12	103	24	21	10	3	58
Psychosis with Cerebral Arteriosclerosis	14	12	8	5	39	27	20	18	12	77
General Paresis	48	11	44	23	126	32	13	34	19	98
Psychosis with Cerebral Syphilis	8	2			10	2		2	2	6
With Other Disturbances of Circulation						2				2
Psychosis with Other Brain or Nervous Diseases		1	1	3	5		2	1		3
Alcoholic Psychosis	18	1	1	1	21	15		2		17
Psychosis Due to Drugs and Other Exogenous Toxins	6	4			10	7	6			13
Paranoia	6	1			7	5				5
Psychosis with Pellagra	1	1		4	6		1	2	3	6
Psychosis with Other Somatic Diseases	4	1	1	2	8	3	3	1		7
Manic Depressive Psychosis	37	94	24	33	188	44	84	14	32	174
Involuntional Melancholia	2	8			10	3	13			16
Dementia Praecox	75	49	27	32	183	75	66	36	25	202
Psychoneurosis and Neurosis	6	5	1	1	13		5		1	6
Psychosis with Constitutional Psychopathic Inferiority	19	6		1	26	10	9			19
Psychosis with Mental Deficiency	19	10	5	6	40	12	20	11	7	50
Epilepsy with Psychosis	18	9	11	3	41	10	8	8	4	30
Psychosis Undetermined	2	4	4	3	13	1	13	5	6	25
Not Insane	2	8	6		16	1	9	3	1	14
Feeble-minded without Psychosis		5	2	2	9	3		3		6
Syphilis without Psychosis	2				2		3			3
Chronic Alcoholism without Psychosis	13	2	2	2	19	13	1	1		15
Drug Addiction without Psychosis		5		1	6	6	2			8
Idiocy without Psychosis	1				1	2				2
Imbecility without Psychosis				1	1					
Psychosis with Menopause							1			1
Puerperal Psychosis										
Epilepsy without Psychosis	3	1			4	3		1		4
TOTAL	372	258	147	135	912	302	300	153	115	870

in collaboration with the State Board of Health. A more detailed account of this work is included elsewhere in this report. Treatment of dementia praecox by insulin shock therapy and metrazol shock therapy was introduced for a limited number of patients at the hospital in 1937, entirely at state expense. Results have been encouraging, but the ward space and equipment, and the medical and nursing staff are inadequate at the present time to give the treatment to more than a fraction of the patients who may benefit by it.

A Planned Therapy Program

The aspect of the situation with which we are here concerned is that in view of the trend in admissions pointed out above, a planned program for the future of the institution should take into account the increasing need for treating dementia praecox in its early stages, noting that patients in whom the duration of the psychosis has been more than one year do not respond well to the new therapies. Presumably it is a better investment for a hospital to restore its patients to health as extensively and as rapidly as possible, than to maintain them with life-long custodial care, at public expense.

With the promise given us by current advances in treatment, we can expect our future population trends to be characterized by an increasingly high turnover, by the admission of patients in less critical stages of mental disorder, and by a recovery rate heretofore considered unattainable.

TABLE NO. 7
ADMISSIONS BY COUNTIES

	JULY 1, 1936, TO JUNE 30, 1937					JULY 1, 1937, TO JUNE 30, 1938				
	W.M.	W.W.	C.M.	C.W.	Total	W.M.	W.W.	C.M.	C.W.	Total
Alachua	15	7	4	5	31	10	5	3	2	20
Baker	1	1			2		1			1
Bay	10	6	3	5	24	14	13	5	4	36
Bradford		1			1	1		2	1	4
Brevard	3			1	4	3	4	1		8
Broward	4	5	4	3	16	2	2	7	1	12
Calhoun	1		2	5	8	8	4	3		15
Charlotte	2	1			3	3	2	1		6
Citrus	2	1	1		4	1				1
Clay										
Collier						1				1
Columbia	2	1	1	1	5	4	5	2		11
Dade	22	20	9	6	57	25	26	8	6	65
De Soto	1	2	1	1	5	2	1			3
Dixie		1	1		2	4		1	2	7
Duval	36	25	26	23	110	24	27	17	22	90
Escambia	5	11	5		21	9	13	5	4	31
Flagler			1		1	1				1
Franklin	1	1			2	4	1	1		6
Gadsden	8	6	4	6	24	7	5	8	8	28
Gilchrist	1	2	1		4		1			1
Glades	1				1	1				1
Gulf	1				1	1	1			2
Hamilton	1	1	1		3	1	1			2
Hardee	6	2			8	2		1	1	4
Hendry		1		1	2				1	1
Hernando	4	1	1		6	2	1		1	4
Highlands	6				6	1	1			2
Hillsborough	52	23	8	7	90	13	24	3	3	43
Holmes	6	3			9	1	6			7
Indian River	2				2	1	4	1		6
Jackson	11	7	5	3	26	7	13	6	7	33
Jefferson	3	2	4	2	11	1	1	4	1	7
Lafayette	2		2	2	6	1	1			2
Lake	3	6		1	10	3	3	1	2	9
Lee	2	1	2		5	4	1			5
Leon	15	4	7	8	34	7	3	8	8	26
Levy	1	1	1		3	8	2	2	1	13
Liberty										
Madison	6	4	5	3	18	4	4	2	3	13
Manatee	2	4			6	3	3	1		7
Marion	4	2	1		7	4	4	3	2	13
Martin	1				1	3		1		4
Monroe	3	3			6	2	2			4
Nassau	2	1			3	1	1	2	1	5
Okaloosa	3	3			6	2	4	1		7
Okeechobee	1				1	1	1			2
Orange	23	14	6	6	49	19	8	6	3	36
Osceola		3			3	3				3
Palm Beach	10	5	6	6	27	7	13	5	2	27
Pasco	4	2	3	1	10		3	1		4

	JULY 1, 1936, TO JUNE 30, 1937					JULY 1, 1937, TO JUNE 30, 1938				
	W.M.	W.W.	C.M.	C.W.	Total	W.M.	W.W.	C.M.	C.W.	Total
Pinellas.....	10	13	3	7	33	7	15	7	1	30
Polk.....	15	18	8	5	46	21	18	5	5	49
Putnam.....	2	4	1	2	9	2	5	3	3	13
Santa Rosa.....	2	2		2	6	3	3			6
Sarasota.....	2	2		1	5	1	3		1	5
Seminole.....	6	5	1	7	19	4	4	8	4	20
St. Johns.....		2	1	2	5	2	1	5	2	10
St. Lucie.....	2	2	3		7	1				1
Sumter.....	1				1	1	2			3
Suwannee.....	3	2		2	7	3	5	1		9
Taylor.....	2	3	2	4	11	2			5	7
Union.....	8	1	3	1	13	6	2	4	1	13
Volusia.....	11	9	3		23	5	11	3	3	22
Wakulla.....	2	2	1		5	5	4	1		10
Walton.....	6	6	2		14	6	4	1	3	14
Washington.....	6	2	4	2	14	4	2	1		7
Other States.....	5	1		4	10	3	6	2	1	12
TOTALS.....	372	258	147	135	912	302	300	153	115	870

PATIENTS IN INSTITUTION BY COUNTIES

As of July 1, 1938

	W.M.	W.W.	C.M.	C.W.	TOTAL
Alachua.....	46	47	34	25	152
Baker.....	3	7	2		12
Bay.....	26	18	8	9	61
Bradford.....	12	9	10	1	32
Brevard.....	16	9	7	7	39
Broward.....	16	11	14	4	45
Calhoun.....	7	3	5	3	18
Charlotte.....	12	4	1		17
Citrus.....	6	10	3	6	25
Clay.....	3	4	1	1	9
Collier.....	2	1			3
Columbia.....	13	13	12	7	45
Dade.....	104	118	51	31	304
De Soto.....	10	11	6	3	30
Dixie.....	3	5	4	2	14
Duval.....	166	145	112	134	557
Escambia.....	41	59	26	27	153
Flagler.....	1	1	2	2	6
Franklin.....	9	4	5	7	25
Gadsden.....	17	21	39	32	109
Gilchrist.....	2	3			5
Glades.....	2			1	3
Gulf.....	1	1			2
Hamilton.....	5	8	4	6	23
Hardee.....	13	5	2	1	21
Hendry.....		3		1	4
Hernando.....	7	7	3	3	20
Highlands.....	1	4	1	1	7
Hillsborough.....	213	216	43	49	521
Holmes.....	10	15	1	2	28
Indian River.....	3	8	4	1	16
Jackson.....	21	37	16	24	98
Jefferson.....	8	5	17	17	47
Lafayette.....	1	5	3	2	11
Lake.....	16	14	6	4	40
Lee.....	14	10	4	7	35
Leon.....	15	12	26	41	94
Levy.....	9	7	9	3	28
Liberty.....	4	1	5	4	14
Madison.....	19	10	15	8	52
Manatee.....	14	16	12	2	44
Marion.....	18	22	11	16	67
Martin.....	4		2		6
Monroe.....	27	21	6	3	57
Nassau.....	3	10	8	11	32
Okaloosa.....	9	10	2	10	21
Okeechobee.....	4	1	1	1	7
Orange.....	46	42	26	17	131
Osceola.....	12	7	1	4	24
Palm Beach.....	39	29	27	19	114
Pasco.....	13	14	4	4	35
Pinellas.....	48	67	26	23	164
Polk.....	57	81	29	31	198
Putnam.....	16	15	20	18	69
Santa Rosa.....	16	8	3	7	34
Sarasota.....	10	9		4	23

	W.M.	W.W.	C.M.	C.W.	TOTAL
Seminole.....	17	16	26	11	70
St. Johns.....	13	11	11	9	44
St. Lucie.....	6	8	3	1	18
Sumter.....	4	8	-----	4	16
Suwannee.....	19	12	8	7	46
Taylor.....	11	11	10	8	40
Union.....	30	2	17	6	55
Volusia.....	17	35	13	19	84
Wakulla.....	7	12	1	2	22
Walton.....	23	19	8	5	55
Washington.....	11	9	7	4	31
Other States.....	10	15	5	5	35
Unknown.....	-----	-----	1	-----	1
	1,381	1,381	789	717	4,268

ACTIVITIES OF THE STAFF

Members of the psychiatric staff have coordinated their efforts in order to carry out the purpose of the hospital in the most effective manner possible. Early in 1937 an "officer of the day" system was put into operation so that every service would be protected by a physician at all times. The officer of the day is informed by each doctor regarding cases of serious illness, with the result that he is well acquainted with all such cases. He is compensated for his night duty by being off duty from the next noon until the following morning, similar arrangements being made for the week-end.

Receiving Service

In the receiving hospital the procedure of receiving and examining patients has been improved in a number of respects. The medical officer who receives the patient makes notation of general behavior and mental condition upon admission. A preliminary physical examination is made on the first day in order to detect any injuries and to institute immediate treatment in the event of acute physical illness. For some months it has been the practice to give a colonic irrigation to every patient upon admission, in order to remove a toxic condition which sometimes aggravates mental symptoms and which often results from temporary confinement in jail. Within a few days the patient is given a complete physical and neurological examination, plus the following laboratory work: (1) X-ray of chest, (2) complete blood count, (3) blood Kahn and Kline, spinal fluid Kahn, cell count and colloidal gold test, (4) sputum examination, (5) urinalysis, (6) stool examination, (7) genito-urinary examination including smears, (8) any other indicated blood work or X-rays, and (9) dental examination. Incidentally, the personnel physician gives the same thorough examination to all applicants for employment. All recently admitted patients and new employees are given typhoid inoculations and smallpox vaccination.

The patient's progress is carefully watched and a complete mental examination is completed as soon as the patient becomes mentally accessible. When relatives or friends visit the patient, the past history, onset of mental disorder and physical symptoms are secured from that source. If the patient has previously been in a mental or general hospital, the record is secured.

Continued notes in the patient's case history after the routine examinations have been completed depend on the mental and physical con-

dition of the patient. If variations occur daily, note is made of them, but notations are made at least twice a week.

Diagnostic Staff

After all data concerning the patient has been secured, the case history is summarized and presented at the diagnostic staff conference. These staff conferences for the several receiving services have been developed to the stage where it is found profitable to schedule one each day of the week. More complete records are now kept of the meetings, which not only arrive at a diagnosis, but more recently have made a prognosis on the case and recommended the forms of therapy to be used, including occupational therapy. This information is then incorporated into the case history.

Progress Notes

After the patient is transferred to the general wards, progress notes are made weekly for four weeks, monthly for five months and every six months thereafter. When a physically ill patient is taken to the general hospital for treatment, upon his transfer back to the wards a summary is written on the case, including a mental progress note.

General Staff Conference

When a case presents a peculiar problem, or when the advisability of furlough or discharge is questionable, the patient is brought before the weekly meeting of the general staff by the attending physician, so that the entire staff in conference may reach a diagnosis and recommendation. The value of these weekly meetings has been enhanced by keeping the records in a more complete form.

Clinical Memoranda

In the fall of 1936 the chief physician began to issue instructions and regulations through the medium of a mimeographed clinical memorandum. This method has proved invaluable in insuring that each member of the personnel is familiar with instructions, and in affording a permanent record of regulations, assignments and procedures. A number of improved reports forms have also been introduced. A daily morning report from each department gives the number of patients on each ward, affording information as to vacancies.

From 1500 to 1800 letters go out each month from the chief physician's office in reply to inquiries concerning patients. A staff of seven stenographers is required to take care of this correspondence and to handle the clerical details necessary in keeping a complete record on each patient. During the past year a numerical filing system has been installed, greatly increasing the ease and efficiency with which records can be referred to.

The former chief physician, Dr. J. H. Pound, laid the groundwork for much of the progress which has been made since he left the institution in July, 1936. The diagnostic staff conferences and the progress note system mentioned above were instituted under his direction early in 1936, their advantages having been merely developed and enlarged on since that time.

Psychologist

In February, 1937, the hospital employed a psychologist to assist the psychiatric staff in its activities. With a master's degree in psychology and with institutional experience, he is qualified to carry on any of the work customarily done by psychologists in mental hospitals.

Psychological examinations are conducted on patients when referred to the psychologist by the attending physician. These examinations include testing general intelligence and specific aptitudes, so as to secure a more complete survey of the patient's personality, and to determine to what degree mental deterioration may have taken place. Testing before and after the administration of any special treatment, such as insulin shock therapy or prefrontal lobotomy, assists in measuring the mental change brought about as a result of the treatment.

The psychologist has also held interviews with any patient desiring an appointment. Recently a system has been introduced experimentally in the white male department, whereby any patient who desires an interview drops a slip of paper containing his name in a box which is easily accessible. The patient is interviewed the following morning. When necessary for the proper handling of the patient's problem, the matter is referred to the attending physician, the chief physician, or the state liaison officer.

Psychological testing has been used to advantage in the selection of personnel. A series of psychological tests were administered to 121 attendants, and tentative standards for the employment of attendants established on the basis of these tests. Such examinations have also been of assistance in the selection of first year students for the School of Nursing.

The psychologist serves as instructor of psychology in the School of Nursing. In addition, he has given a series of lectures on psychology and the care of mental patients to attendants in the white female and white male departments. Various research projects have been undertaken and papers written.

Research

In the recent past staff members have been active in preparing research papers, which have been presented before various medical societies and have been published. Among the topics covered during the past two years are: nursing in neuro-psychiatric disorders, insulin shock therapy, modern therapy in psychiatry, the care of the mental tuberculous patient, malarial therapy, mental diseases encountered by the general practitioner, the prefrontal lobotomy in cases of involutional melancholia, and others. Papers written by the staff psychologist have included a study of seventy white female attendants, job analysis of the position of attendant, the organization of the therapy program, and a program of industrial therapy.

Psychiatric Clinics

Five psychiatric clinics have been conducted by the staff during this period for visiting classes from the University of Florida and Florida State College for Women. The wealth of clinical material available at the hospital makes it possible to make these sessions particularly instructive.

Library

The staff has been greatly assisted in its activities by additions to the medical and psychiatric library. More than trebled in size during the biennium, the library has been modernized with recent reference works, current psychiatric literature, and professional periodicals.

THE GENERAL HOSPITAL

The institution's general hospital of 341 beds, consisting of the base hospital with 173 beds and the receiving hospital with 168 beds, is ordinarily filled to capacity. In addition to the hospitalization of the physically ill, the physical and mental examination, observation and diagnosis of newly admitted patients is carried on in the general hospital.

The efficiency of hospital care has been aided during this biennium by enlarging the graduate nursing staff from eleven to seventeen, and by a corresponding, although smaller increase in student nurses and orderlies. When the new general hospital building of 100 beds is placed into use, the adequacy of hospital facilities will be substantially enlarged. There is need, however, for another wing on this building, to provide space for the operating room, now housed temporarily in the tuberculosis hospital, for a hydrotherapy department, for the pathological laboratory, and for the department of radiology.

The tabulation which follows comprises a report on patients received and hospitalized during this period. It does not include the hospitalization of employees or other persons.

STATISTICAL REPORT OF GENERAL HOSPITAL

White Male

	<i>July 1, 1936 to June 30, 1937</i>	<i>July 1, 1937 to June 30, 1938</i>
New, Regular Commitments	348	282
New, Transferred from Other States	5	3
New, From Florida Farm Colony	7	2
New, Drug Addicts, Voluntary Commitments	4	0
New, Drug Addicts, Admitted under Acts of 1935	0	3
New, Drug Addicts, Admitted under House Bill 329 ..	1	0
Admitted by Authority of Board for Treatment—		
Not Insane—No papers	6	2
Readmitted on Former Commitments	0	8
From Furlough, Regular Manner	51	60
From Furlough on New Commitments	0	0
From Furlough, Furloughed under House Bill 329	1	1
From Escape, Regular Manner	31	9
From Escape on New Commitments	1	1
New, Admitted here to be transferred to Missouri	0	1
Medical Treatments	2,393	2,197
Daily Average of State Patients	75	80

White Female

	<i>July 1, 1936 to June 30, 1937</i>	<i>July 1, 1937 to June 30, 1938</i>
New Admissions, Regular Commitments	246	285
New, Transferred from Other States	2	6
New, Transferred from Florida Farm Colony	4	1
New, Drug Addicts, Voluntary Commitments	4	1
New Drug Addicts, Admitted under Acts of 1935	1	1
New, Drug Addicts, Admitted under House Bill 329 ..	1	1
Readmitted on Former Commitments	1	5
From Furlough, Regular Manner	54	60
From Furlough on New Commitments	1	0
Medical Treatments	1,745	1,832
Daily Average of State Patients	66	65

Colored Male

	<i>July 1, 1936 to June 30, 1937</i>	<i>July 1, 1937 to June 30, 1938</i>
New Regular Commitments	144	143
New, Transferred from Other States	0	2
Admitted by Authority of Board for Treatment,		
Not Insane, No Papers	1	0
Readmitted from Veterans' Hospital, Tuskegee, Ala.	0	1
Readmitted on Former Commitments	0	1
From Furlough, Regular Manner	6	4
From Furlough on New Commitments	1	1
From Escape, Regular Manner	12	6
From Escape on New Commitments	1	5
Medical Treatments	881	1,051
Daily Average of State Patients	30	22

Colored Female

	July 1, 1936 to June 30, 1937	July 1, 1937 to June 30, 1938
New Admissions, Regular Manner	127	109
New, Transferred from Other States	5	1
Readmitted on Former Commitments	0	4
Discharge Revoked and Readmitted	1	0
From Furlough, Regular Manner	13	9
From Furlough on New Commitments	1	1
Medical Treatments	873	771
Daily Average of State Patients	38	33

Total for Hospital

	July 1, 1936 to June 30, 1937	July 1, 1937 to June 30, 1938
New Admissions, Regular Commitments	865	819
New, Transferred From Other States	12	12
New, Transferred from Florida Farm Colony	11	3
New, Drug Addicts, Voluntary Commitments	8	1
New, Drug Addicts, Admitted Under Acts of 1935	1	4
New, Drug Addicts, Admitted Under House Bill 329	2	1
New, Admitted Here to be Transferred to St. Louis, Missouri	0	1
Admitted by Authority of Board for Treatment, Not Insane	7	2
Readmitted on Former Commitments	0	18
Readmitted from Veterans Hospital, Tuskegee, Ala.	0	1
Discharge Revoked and Readmitted	1	0
From Furlough, Regular Manner	124	133
From Furlough on New Commitments	3	2
From Furlough, Furloughed under House Bill 329	1	1
From Escape, Regular Manner	43	15
From Escape on New Commitments	2	6
Medical Treatments	5,892	5,851
Daily Average of State Patients	209	200

CONDITIONS OF GENERAL HEALTH

On the medical department of the Florida State Hospital is placed the responsibility of handling all the health problems of a community of nearly 4300 patients, 350 prisoners, and 860 employees with their dependents. Efforts to raise the general level of health have met with material success in recent years, as is indicated conclusively in the falling death rate.

Eradication of Amoebic Dysentery

Probably the outstanding achievement during the biennial period now closing has been the eradication of the amoebic dysentery endemic, which for many years had been one of the major problems of the institution. The situation had come to be regarded as a permanent one, and in July, 1936, plans had been made to construct special buildings for the care of

these patients. There were 200 active cases at that time, confined in four isolation wards and requiring special nursing staffs for their care.

Dr. Charles F. Craig, a world authority on amoebic dysentery was consulted. The cooperation of the State Board of Health and the U. S. Public Health Service was secured and a survey of the hospital reservation was instituted, checking sewerage and water connections for possible sources of infection.

Strict sanitary regulations were put into effect in the general kitchen and at other points where the infection might spread, and the personnel was checked, all cases being placed under treatment immediately. A campaign of active and intensive therapy was instituted in line with the recommendations of Dr. Craig. In twelve months the incidence was reduced from 200 to three cases, and as the biennial period now closes there is not a single active case of amoebic dysentery in the institution. The isolation wards have been discontinued and are used for other purposes, and the personnel assigned to this work has been transferred to other departments.

It is important to mention here that without the whole-hearted cooperation which the chief physician received from each member of the medical staff, the campaign to rid the institution of this disease could not have succeeded.

The Control of Epidemics

The handling of all contagious disease is on a basis of strict quarantine. In view of the many difficulties encountered in the management of an influenza epidemic in a crowded mental institution, it is believed that the handling of the epidemic occurring at this hospital in the spring of 1937 was efficient and effective. All cases were isolated in separate rooms, or where facilities were lacking, by the use of screens. Patients wore masks in so far as cooperation would permit. Nurses and attendants in contact with influenza cases wore sterilized gowns and masks, and washed their hands in an antiseptic solution before and after entering wards. Employees working in the kitchen had to be free from infection or a cold, and utensils used by influenza cases were sterilized. All types of gatherings and group recreation were discontinued and no visitors allowed. Books and magazines were not exchanged between wards.

As a result of these stringent regulations, the potential seriousness of the epidemic was greatly diminished. Examination of throat washings taken from patients and sent to the Rockefeller Foundation in New York revealed that this was the same type of infection which was wreaking havoc in other parts of the country. Out of 380 cases occurring at the Florida State Hospital during the course of the epidemic, there was a total of only five deaths directly due to influenza.

Sanitary Precautions

Various sanitary regulations and precautions instituted during the past two years have assisted in improving conditions of health. The pastuerization of all milk, the weekly testing of milk and drinking water by the clinical laboratory, and the examination of cattle for Bang's disease and tuberculosis are recent measures of this character.

Improvement in Diet

Systematic efforts have been made to improve both general and special diets from a health standpoint. Approximately 300 patients are now on special diets at all times, exclusive of patients in the general hospital, who are served by the diet kitchen. In December, 1936, for the first time a registered, fully qualified dietitian was placed in charge of the diet kitchen, resulting in a more scientific planning of meals for the physically ill.

Other Checks on Physical Health

Of no small consequence in the maintenance of physical health has been the thoroughness with which physical examinations are given to newly admitted patients and applicants for employment, as is pointed out elsewhere in this report. The use of X-rays of the chest, begun nearly two years ago, has revealed cases of tuberculosis which other tests failed to indicate. All new patients and employees are given smallpox vaccination and typhoid inoculation. The establishment of the tumor clinic during this period has resulted in the discovery of a number of cases of malignancy which have been successfully treated. Another check on the general health of patients is the practice of weighing each patient in the institution every thirty days.

Active and intensive treatment of cases of syphilis is a routine activity of the hospital. At the close of the biennial period about twenty per cent of the patients had some form of syphilis. This is about the average for mental hospitals of this size in the United States.

Ward Dressing Rooms

The reorganization of dressing rooms on the general wards has made it possible to handle a greater amount of minor medication without transferring the patient to the general hospital. Three full-time graduate nurses are assigned to these dressing rooms. Treatment and dressings for abrasions, lacerations, ulcers, eruptions, etc., on the wards now amount to approximately 12,000 per month.

Indicated surgery has been increased during this period. General hospital care has been improved by increasing the graduate nursing staff

from eleven to seventeen. Progress in all phases of medical attention has been made possible by the readiness of the Superintendent, and the Board of Commissioners on every occasion to supply the needed hospital equipment and drugs.

SURGERY

No operative procedures are undertaken at the hospital unless it is believed that the patient will be benefited by surgical treatment. There has been a substantial increase, however, in indicated surgery, of both a major and minor character. Sometimes a physical defect is found to be an irritating factor to the mental condition of the patient, and its removal brings about a noticeable improvement mentally as well as physically.

The surgical service has been expanded by the employment of an outstanding neurosurgeon, who visits the hospital each month to handle the surgical treatment of patients whose mental condition is attributed to some neurological defect. Since his affiliation with the staff, the visiting neurosurgeon has performed or supervised 45 operative procedures. The results achieved in some of these operations have been no less than amazing, having brought about a complete mental recovery. The cases have not been sufficiently numerous, however, to warrant statistical generalizations at this time.

A material decrease is noted in the number of fractures calling for treatment. Partial explanation of this trend may lie in the addition of new ward space, alleviating the critically overcrowded condition which prevailed during the previous two year period. Congested living conditions almost invariably act as a mental and emotional irritant, causing disturbances and injuries. The increase in attendants made when the new ward buildings were placed into use is also a factor, as closer supervision lessens the frequency of accidents and injuries.

RADIOLOGY

A full time radiologist was added to the medical staff in November, 1936. The purchase in February, 1937, of fifty milligrams of radium and in July, 1937, of a 200 K. V. deep therapy shock-proof X-ray machine further enhanced the value of radiological service. These pieces of equipment have been of inestimable service in the treatment of malignancy and of other conditions which respond to no other type of therapy.

The number of diagnostic X-rays and fluoroscopic examinations have been greatly increased, with a resulting increase in the effectiveness with which medical treatment is instituted in these cases.

It is often the case that patients who are in mental condition to be released from the institution must remain until medical treatment for their physical condition is concluded. The effective use of the radiological service in diagnosis and in treatment is often seen to shorten the period of hospitalization necessary, particularly when used in conjunction with surgery or other types of therapy.

INSULIN SHOCK THERAPY

Experimentally introduced in this country in 1934, insulin shock therapy has been employed by many state hospitals for the treatment of dementia praecox in a limited number of patients. More recently it has been adopted as a routine treatment in a few institutions. In September, 1937, it was instituted at the Florida State Hospital, where its use has been essentially cautious and conservative.

Tentative Conclusions

At the close of a nine month period during which the therapy has been completed in nineteen cases, it may be tentatively concluded that the treatment is efficacious in early cases of dementia praecox, and that its administration under a specially trained staff need not be regarded as hazardous. On the basis of the extremely small number of cases, a statement as to the proportion of recoveries effected would not prove to be statistically reliable. Future selection of cases will be benefited by the findings of the first year of the therapy; however, to predict at this time that a higher remission rate would result from the treatment of a larger group or a more select group would not be in line with a scientific approach to the problem. The only conclusion that can be stated with definiteness at present is that the results achieved have been highly encouraging.

Prior to instituting the treatment, a member of the staff was sent by the Board of Commissioners of State Institutions to the Elgin State Hospital in Illinois for a period of study and experience in the work. Upon his return he was placed in charge of the insulin ward with the assistance of a physician who had had some experience in the therapy. A graduate nurse was trained for special duty on the service.

The cases were chosen carefully, representing different types of the psychosis in varying stages, so that the findings could be utilized with

profit in the later selection of cases for treatment. Six to eight patients have been treated at one time, several weeks being required to complete the therapy. All of the subjects have been white, physically healthy males under thirty years of age, with a psychosis under seven year's duration, nineteen having completed the therapy, and eight still being under treatment.

Results Achieved

Results in the nineteen concluded cases may be tabulated as follows:

<i>Classification</i>	<i>Duration of Psychosis</i>	<i>No. Cases</i>	<i>Percentage</i>
Greatly Improved (Apparently recovered)	Less than one year	6	31.6
Moderately Improved	One to seven years	5	26.3
Slightly Improved	One to seven years	5	26.3
Unimproved	Two to seven years	3	15.8
TOTALS		19	100.0

It will be noted that every patient in whom the psychosis had been less than a year in duration was classified as greatly improved, or what is ordinarily spoken of as recovered. They are all out of the institution and gainfully employed at the present time. Sixteen out of the group of nineteen have been furloughed, it being the practice to furlough rather than to discharge insulin shock treated patients. There have been two to return to the institution, one in the moderately improved, the other in the unimproved group. The others are apparently well adjusted, as revealed in monthly reports from their guardians. All of the eight patients still under treatment are reported as showing improvement.

Each patient who has been given the treatment has evidenced physical improvement and made a gain in weight. There have been no fatalities as a result of the therapy, and but few complications, all remediable.

Metrazol Shock Therapy

Metrazol shock, a more recent discovery than insulin shock therapy, has been employed in treating dementia praecox, but has not been carried on long enough to afford statistics or allow even tentative conclusions to be made. Like insulin, Metrazol may be used successfully only in cases where the disease has been of short duration; but it has been found efficacious on some types of dementia praecox which fail to respond to insulin. The administration requires 14 to 20 treatments over a period of seven to ten weeks. To date Metrazol has been used on six white male patients, six white female, and 33 colored male.

The Future Use of Therapy in Dementia Praecox

Until the discovery of the new shock therapies, victims of dementia praecox were regarded as hopeless cases. It is estimated that this one

mental disorder is responsible for fifty per cent of the population of mental hospitals in this country, indicating something of the cost at which these patients must be maintained unless treatment can be instituted in the recoverable stage of the psychosis.

If the hospital could be equipped and staffed for the expansion of the insulin and metrazol shock therapies, if admitted in the early stage of the disorder, it is believed that the majority of these cases could be treated successfully and make life-long custodial care unnecessary. It is observed that during the last fiscal year, cases diagnosed as dementia praecox constituted 25.2 per cent of all first admissions, the figure for this year being 202 admitted. Moreover, as has been previously pointed out, admissions of dementia praecox are steadily mounting, the increase for the last biennial period having been twenty per cent over the previous two years.

To give the desired treatment adequately, additional wards, doctors, nurses and attendants would be required, as the work is highly specialized.

MALARIA THERAPY

Since its inception in 1931, through the collaboration of the Division of Malaria Research of the State Board of Health, supported by funds received from the International Health Division of the Rockefeller Foundation, malaria therapy has been continuously available to neurosyphilitic patients of the hospital on the recommendation of its staff. General management of the patients during their malaria attack is by a physician from the staff of the Division of Malaria Research under supervision of the Chief Physician of the hospital. A technician-nurse is also provided by the division. Laboratory and insectory facilities of the division, located in Tallahassee, and a recent addition of laboratory space in the hospital are utilized in the work.

The service is available to all patients recommended by the hospital staff and special arrangements have been made whereby patients with mental disease referred by practicing physicians may be treated without legal commitment to the institution.

Malaria therapy is necessarily restricted to patients who are found to be in reasonably good physical condition. Inoculations are made by both infected blood and mosquito vectors, using a local strain of all three species of plasmodiae. During the attack patients are hospitalized and the clinical course is guided by daily parasite counts, weekly blood counts and urinalyses, and constant supervision for complications. Unless there is some contraindication, the malaria is allowed to terminate spontaneously.

The value of this form of therapy is clearly shown in a survey made in 1937 of the preceding six years work. Greatest benefit was to neurosyphilitics of the parietic type, but there is definite evidence that it is of prophylactic value in cases of cerebrospinal syphilis without psychosis.

Those patients who are young and whose symptoms are of short duration show the greatest improvement. In any given class, improvement is proportional to the severity and duration of the malaria attack. An optimum of conditions seems to be found in selected patients who experience over twenty paroxysms of fever, reaching 104 degrees or over, in which group the remissions (those improved sufficiently for discharge) reached 62.5 per cent. Age, duration of symptoms, fewer paroxysms, or lower temperature levels retard these figures.

The use of chemotherapy with malaria therapy gives better results than either of these alone.

The following tables show distribution of inoculations made during the period July 1, 1936 to June 30, 1938.

TABLE A

INOCULATIONS WITH	WHITE	COLORED
A. TERTIAN MALARIA		
(a) Mosquitoes		
Takes.....	104	---
Failures.....	37	---
Total.....	141	---
(b) Infected Blood		
Takes.....	78	---
Failures.....	18	---
Total.....	96	---
B. QUARTAN MALARIA		
(a) Infected Blood		
Takes.....	13	1
Failures.....	---	---
Total.....	13	1
C. ESTIVO-AUTUMNAL MALARIA		
(a) Mosquitoes		
Takes.....	25	60
Failures.....	4	14
Total.....	29	74
(b) Infected Blood		
Takes.....	4	30
Failures.....	1	12
Total.....	5	42

TABLE B

DIAGNOSIS	WHITE	COLORED
Tertian With Mosquitoes		
Syphilis, Cerebro-Spinal	68	---
Syphilis, Systemic	26	---
Manic-Depressive	13	---
Dementia Praecox	32	---
Feeble-mindedness	2	---
Tertian With Infected Blood		
Syphilis, Cerebro-Spinal	66	---
Syphilis, Systemic	19	---
Manic-Depressive	2	---
Dementia Praecox	9	---
Quartan With Infected Blood		
Syphilis, Cerebro-Spinal	12	1
Syphilis, Systemic	1	---
Estivo-Autumnal With Mosquitoes		
Syphilis, Cerebro-Spinal	8	56
Syphilis, Systemic	6	12
Dementia Praecox	15	5
Estivo-Autumnal With Infected Blood		
Syphilis, Cerebro-Spinal	2	36
Syphilis, Systemic	3	4
Dementia Praecox	---	2

TABLE C

DEATHS	WHITE		COLORED	
	Male	Female	Male	Female
Tertian	1	--	--	--
Quartan	1	--	--	--
Estivo-Autumnal	--	--	3	3

TUBERCULOSIS HOSPITAL

Patients found to be suffering from tuberculosis are immediately transferred to the tuberculosis hospital, where they are given special nursing care. The tuberculosis unit is run as a separate department, under the direction of a tuberculosis specialist, and with a special nursing staff.

More tuberculous cases are under treatment now than formerly, which may be partly attributed to earlier diagnosis, aided by routine chest plates on newly admitted patients. X-rays are also made on applicants for employment, and all student nurses are given the Mantoux tuberculin test.

There are now 38 cases under treatment in the tuberculosis hospital, 22 white male and 16 white female. There are 13 others, four colored male and nine colored female, receiving treatment in other wards. At present the tuberculosis hospital, which has a capacity of ninety beds, is being used as follows: two wings for tuberculous patients, white male and white female, one wing for white male chronic cases, and one wing for employees. The operating room is also temporarily housed in this building.

THE CLINICAL LABORATORY

The pathological laboratory, staffed by three technicians, has handled a substantial increase in laboratory testing during this period. Wasserman tests, both of blood and spinal fluid, have been more than doubled in connection with the intensive treatment of syphilis. The inclusion of a complete blood count in admission examinations has increased the laboratory work, and the routine testing of milk and drinking water has also been a factor.

DRUG DEPARTMENT

The hospital is equipped with a drug department under the direction of a registered pharmacist. Drugs are dispensed to the various wards daily on doctors' prescriptions. It is necessary to carry one of the most complete lines of drugs in the state, due to the fact that the institution is comparatively isolated. The quantity needed is large because most of the patients are physically under par and many are admitted in a physically ill condition. Only drugs of the highest quality are used.

EYE, EAR, NOSE AND THROAT DEPARTMENT

During the major portion of the past biennium, the hospital has been without the services of an Eye, Ear, Nose and Throat specialist. One has been employed, however, and will report for duty some time in the near future.

SCHOOL OF NURSING

Definite progress toward reaching the standards set by the National League for Nursing Education has been made at the Florida State Hospital School of Nursing during the two-year period now closing, and it is believed that these standards will be fully met within the next two or three school terms.

This biennial period has seen the employment of the first full-time director the school has had. The present director is a graduate of an outstanding school of nursing, with two years of postgraduate study, and experience in public school nursing, hospital nursing and supervising and medical supervising.

Increase in Academic Hours

The academic hours for the first two years have been raised to meet the standard, and it is expected to do the same for the third year of study during the coming session. The first year class is now given one month of study before practical work begins. The curriculum has been expanded by the addition of occupational therapy, microbiology, and increased work in the laboratory. The faculty is now composed of the director, the medical staff, the psychologist, laboratory technician, and occupational therapist.

Plans are in shape to increase the period of affiliation with a general hospital, by means of which practical experience is obtained in obstetrics, pediatrics and communicable diseases. Text books have been re-selected and brought up to date. A skeleton, anatomical models, and a number of charts have been added to the classroom equipment.

Enlargement of School

The enrollment of the school is being enlarged by admitting two new classes each year instead of one, the first extra class beginning the summer of 1938. By this procedure the enrollment will be virtually doubled in size in three years' time. Since the school is now in a position to select its students rather than merely to accept those who wish to enroll, entrance requirements have been raised. Information gained from personal interviews, psychological tests, and physical examinations, as well as academic preparation, are considered in making the selection.

REPORT OF THE CHIEF DENTIST

*To the Superintendent
Florida State Hospital*

SIR:

Herewith is submitted the report of the Dental Service of the hospital, with tabulation of its operations for the biennial period of July 1, 1936 to June 30, 1938.

The changes in personnel of this department include the addition of one assistant dentist to our staff in the person of Dr. E. L. Stephens on January 3, 1937, and the resignation on June 15, 1938 of Dr. R. P. Stubbins.

No physical changes have taken place in the Dental Infirmary building during this period, and it is recognized that we are at present operating under marked difficulties due to lack of space and equipment for carrying forward our extended routine. During the past two years, and coincidently with the addition of one assistant dentist to the dental staff, there has been inaugurated a routine of periodic re-examination of every patient in the institution. The results of this plan are now being evidenced in the increased number of sittings and augmented number of operations. All of our present operating rooms are constantly occupied, and our reception room space is so inadequate that were it not for our generally mild climate, permitting the patients to sit out of doors, we could not operate on anything like our present scale. In this connection the handling of colored patients is a matter of concern, for at present we have no facilities for the separation of this portion of our population from the white patients, particularly in connection with operating room procedures.

The above items are mentioned not because the conditions are unknown to you, or lack your sympathy and understanding, but because they seem pertinent to a report of this nature.

The dental treatment for the inmates of the Florida Industrial School for Boys continues to be given by this department, and since the addition of one operator to our staff it is possible to carry on this work with much less embarrassment to our routine than formerly. There is, at this time, in process of construction, a complete two chair dental infirmary at the school, which will be modernly equipped and serve the need in this respect for many years to come, as well as adding definitely to the efficiency of our service in that institution.

It will be noted that the report of the Chief Dentist for the past two biennial periods mentions the matter of dental service for the employees of this institution. With the steadily increasing population of patients and the more comprehensive dental service given them, the problem of adequate care of the employees remains with us, and with our present personnel cannot be met while maintaining the routine for the patients, which unquestionably constitutes our first responsibility.

In this connection I would recommend the addition to our staff of one operator who shall be known as Personnel Dentist, and whose whole time shall be devoted to the dental care of the employees. Dentally efficient employees have been found by many large commercial organizations to be a safeguard against illness of many types, to the end that provision for free dental care is considered a paying investment, and may I urge that this provision be considered for our institution.

There follows a detailed record of dental operations for this past biennium:

	JULY 1, 1936, TO JUNE 30, 1937	JULY 1, 1937, TO JUNE 30, 1938
Examinations.....	1,842	1,096
Re-examinations.....	1,364	1,958
Extractions.....	6,442	7,246
Prophylactic Treatments.....	2,957	3,561
Palliative Treatments.....	1,238	1,867
Irrigations.....	1,492	2,201
Observations.....	3,708	3,447
Denture Preparations and Adjustments.....	2,381	2,955
Dentures Delivered.....	753	745
Crown and Bridge Preparations and Adjustments.....	761	743
Crowns and Bridges Delivered.....	297	363
Repair Dentures.....	192	291
Repair Bridges.....	19	14
Fillings.....	3,879	3,980
Radiographs.....	539	576
Hospital and Ward Visits.....	693	835
Fractures.....	4	5
Total Patients Seen (Sittings).....	25,179	24,392
Total Operations.....	28,397	28,666
Completed Indicated Dental Treatment for.....	2,840	3,021

This opportunity is taken to acknowledge the complete cooperation given the functioning of this department by the Superintendent, Medical Staff, department heads and employees of the institution.

Respectfully,

A. F. DOUGLAS, D.D.S.
Chief Dentist.

INDEX

	Page
Activities of the Staff	40
Admission of Younger Patients	32
Admissions 1936-37	27
Admissions 1937-38	28
Admissions by Counties	36
Age Level of Patients	32
Amoebic Dysentery, Eradication of	45
Chief Dentist's Report	57
Chief Physician's Report	24
Clinical Laboratory	55
Clinical Memoranda	41
Construction	13
Cost Accounting	10
Death Rate	26, 31
Dementia Praecox Admissions	33
Dental Service	57
Diagnostic Staff	41
Diet, Improvement in	47
Diet Kitchen	18
Dietary Department	18
Dressing Rooms, Ward	47
Drug Department	55
Eye, Ear, Nose and Throat Dept.	56
Engineering	14
Epidemics, Control of	46
Expenditures, 1936-37, Chart	6
Expenditures, 1937-38, Chart	7
Farm	15
Financial Statement	10
Fire Department	19
General Health, Conditions of	45
General Hospital	43
General Hospital, Statistical Report	44
General Kitchen	18
General Staff Conference	41
Governing Body	3
Historical Statement	8
Horticulture	16
Insulin Shock Therapy	49
Laundry	17
Library, Medical and Psychiatric	43
Library, Patients' and Employees'	20
Malaria Therapy	51
Mattress Factory	17
Medical Department	23
Medical Staff	23
Metrazol Shock Therapy	50
Movement of Population	26
Movement of Population, Statistical Reports	26-29

INDEX—Continued

	Page
Occupational Therapy	20
Patients by Counties	38
Planned Therapy Program	35
Productive Departments	13
Progress Notes	41
Psychiatric Clinics	43
Psychologist	42
Psychoses of First Admissions	34
P.W.A. Construction	13
Radiology	48
Receiving Service	40
Recovery Rate	26
Recreational Therapy	20
Releases 1936-37	29
Releases 1937-38	30
Research	43
Sanitary Department	19
Sanitary Precautions	47
Scope of the Institution	9
Sewing Room	17
School of Nursing	56
State Liaison Officer	20
Surgery	48
Transmittal	4
Tuberculosis Hospital	55